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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,886	06/29/2001	Collin P. Galloway	00066CON	1023

7590

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT

PAPER NUMBER

1752

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,886

Applicant(s)

GALLOWAY ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-110 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

- I. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Ia. Claims 1-90 drawn to a printing plate comprised of a radiation-absorptive layer comprises at least one modified pigment various limitations as found in independent claims 1, 23, 36, 41, 46, 56, and 65, classified in class 430, subclass 138.
  - Ib. Claims 91-92, drawn to a method of imaging a printing plate of Group Ia dependent upon the pigment of claim 1, classified in class 430, subclass 300.
  - II. Claims 93-94, drawn to a flexographic printing plate comprising a UV curable layer and a radiation-absorptive layer wherein the radiation-absorptive layer comprises at least one modified pigment product, classified in class 430, subclass 273.1.
  - III. Claims 95-96, drawn to a thermal transfer recording material comprised of a) an ink layer, b) a photothermal layer, c) a support wherein the photothermal layer is comprised of at least one modified pigment product, classified in class 430, subclass 200.
  - IV. Claims 97-98, drawn to a proofing material comprised of a) a radiation transparent support, b) a radiation curable layer and c) a receiving layer wherein the radiation curable layer comprises at least one modified pigment product, classified in class 430, subclass 259.

- Va. Claims 99-100, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment having attached at least one organic ionic group and at least one amphiphilic counter ion wherein said amphiphilic counter ion has a charge opposite to that of the organic ionic group, classified in class 430, subclass 14.
- Vb. Claims 101-102, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula  $-X-SP-[A]_pR$  wherein A represents an alkylene oxide group, classified in class 430, subclass 18.
- Vc. Claims 103-104, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula  $-X-SP-[Vinyl]R$  wherein Vinyl represents an acrylic or styrenic homo- or copolymer comprising repeating substituted or unsubstituted acrylic or styrene monomer units, classified in class 430, subclass 18.
- Vd. Claims 105-106, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment having attached at least one

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organic group represented by the formula -X-SP-[EI]R wherein EI represents an alkyleneimine-based polymer or copolymer, classified in class 430, subclass 18.

- Ve. Claims 107-108, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-SP-[SMA]R wherein SMA represents a styrene-maleic anhydride polymer or derivative, classified in class 430, subclass 18.
- Vf. Claims 109-110, drawn to a black matrix formed by applying a photosensitive coating on a clear substrate wherein the photosensitive coating comprises at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings, classified in class 430, subclass 18

The inventions are distinct, each from the other because of the following reasons:

2. Inventions forming the Group I/II comprised of Ia-Ib and II and the Group III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation. Group I/II is drawn to printing plate blanks, i.e. unimaged printing plates which will be imaged by laser irradiation then the surface will be used for printing while Group III is drawn to thermal transfer recording material which already has an ink layer and upon image will transfer part of itself to a separate receiving layer. This kind of material has different

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chemical needs to produce the end product than do the printing plates of Group I/II. Further, there is no requirement that the photothermal layer be radiation absorptive nor are the scopes of pigments the same from Group I/II and Group III. Applicants have separated these groups in their specification by the method that they will be imaged and the final product as well. Thus, these two groups at best have in common a subcombination of a modified pigment, but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized *in Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process. The imaged radiation absorptive layer of Group I/II remains on the substrate to accept or not accept ink for printing, the imagewise exposed photothermal layer of Group III transfers to a separate support in some manner or form.

3. Inventions forming the Group I/II comprised of Ia-Ib and II and the Group IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation. Group I/II is drawn to printing plate blanks, i.e. unimaged printing plates which will be imaged by laser irradiation then the surface will be used for printing while Group IV is drawn to a proofing material which will be upon imagewise exposure strippable in the sense that the receiving layers and supports will be separated physically splitting the radiation curable layer between them in an imagewise fashion. The physical requirements of the plates of Group I/II are radically different than those of Group IV for these reasons. The plates of Group

I/II are upon imagewise exposure to infrared laser ablated or made developable or change properties in a way that inks differentiate the exposed and unexposed surfaces upon forming an inked plate. The proofing materials of Group IV upon imaging must change in adhesivity from one layer to another so as to differentiate an image upon stripping of layers. Further Group IV is required to be radiation curable. There is no such limit with the radiation-absorptive layers of Group IV. Only II has a UV curable layer and it is separate from the pigment containing radiation-absorptive layer of the flexographic plate set forth. Thus, these two groups at best have in common a subcombination of a modified pigment, but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized in *Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process.

4. Inventions forming the Group I/II comprised of Ia-Ib and II and the Group V comprised of Va-f are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation and different functions. Group I/II is drawn to printing plate blanks, i.e. unimaged printing plates which will be imaged by laser irradiation then the surface will be used for printing while Group V is drawn to a series of black matrices that have already been imaged by using photosensitive coatings on clear supports wherein the matrices are designed as set forth by applicants in paragraph [0079] is an integral component of an image display. Thus, the mode of operation is clearly different. Group I/II is to be imaged and Group

V has been imaged. The black matrices are not the printing plates formed from Group I/II.

Thus, these two groups at best have in common a subcombination of a modified pigment, but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized in *Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process.

5. Inventions III and Group V comprised of Va-f are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01).

In the instant case the different inventions are not capable of use together and have different functions. Invention III is drawn to an unimaged thermal transfer recording material comprised of an ink layer and a photothermal layer while Inventive Group V is drawn to an imaged Black matrix formed by applying a photosensitive coating on a clear substrate. The thermal transfer recording material cannot become the photosensitive coating required to make the black matrix. Also the black matrix is to be used as a filter while the recording material is to be used to form an image that could be used in color proofing or medical diagnostic systems according to applicants in [0077]. Thus, these two groups at best have in common a subcombination of a modified pigment, but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized in *Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process.



6. Inventions IV and Group V comprised of Va-f are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not capable of use together and have different functions. Invention IV is drawn to an unimaged proofing material comprised of a radiation curable layer and a receiving layer while Inventive Group V is drawn to an imaged Black matrix formed by applying a photosensitive coating on a clear substrate. The proofing material of Group IV cannot become the photosensitive coating required to make the black matrix. Also the black matrix is to be used as a filter while the recording material is to be used to form an image by stripping two layers. Thus, these two groups at best have in common a subcombination of a modified pigment, but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized in *Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process.

7. Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions they are not disclosed as capable of use together and they have different modes of operation. Group III operates upon imaging by thermally transferring from one layer to another. Group IV operates upon imaging by changing the adhesive properties of the radiation curable layer. Thus, these two groups at best have in common a subcombination of a modified pigment,

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but there are no claims to the subcombination of the pigment to link them together in any manner. It is recognized in *Ex parte Smith*, 1888 C.D. 131, 44 O.G. (Comm'r Pt. 1888) that a subcombination is not generic to different combinations in which it is used. See particularly MPEP 806.04 (c). These two groups are incapable of being used in practicing the same process.

8. Inventions Ia and Ib are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the printing plate of Ia can be imaged with a thermal print head as a heat source instead of a laser.

9. Inventions Va through Vf are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions different effects. Each group has a different pigment that is mutually exclusive from the other. There is no overlap the examiner can find. The product formed from each does not overlap the other.

10. Because these inventions are distinct for the reasons given above and the search required for Group Ia is not required for Group Ib, restriction for examination purposes as indicated is proper.

11. Because these inventions are distinct for the reasons given above and the search required for Group Ia is not required for Group II, restriction for examination purposes as indicated is proper.

12. Because these inventions are distinct for the reasons given above and the search required for Group Ib is not required for Group II, restriction for examination purposes as indicated is proper.

13. With respect to the rest of the unrelated inventions, there is no requirement that undue burden be addressed. See MPEP 806.04 and 808.01 (a).

14. No attempt to obtain a provisional election by telephone was made due to the complexity of this requirement.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.*

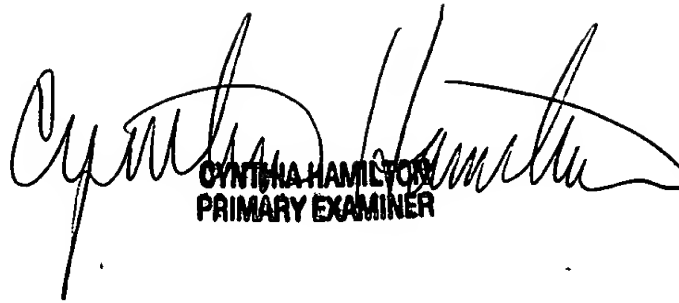
*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.*

*Any inquiry of papers not received regarding this communication or earlier communications, or of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Center of Technology Center 1700 whose telephone number is (703) 306-5665.*

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Cynthia Hamilton  
September 14, 2002



**CYNTHIA HAMILTON  
PRIMARY EXAMINER**